Summary

As one of the world’s earliest industrialising nations, Scotland has a wealth of industrial heritage. However, as is the case in Eastern Europe, much of it has been put in increasing danger as a result of a combination of rapid de-industrialisation, growing pressure from developers, and sustained neglect. In many cases, demolition and clearance of industrial sites has been the default position, but as a consequence of enhanced statutory protection and regulation, together with greater awareness of climate-change issues, the chances of survival have improved. A further reason for optimism is the Scottish Government’s national performance framework [1], which defines its objectives in terms of 16 specific national outcomes, several of which have the potential to highlight and build upon the value of our industrial past. The purpose of this paper is to focus on two of these outcomes, both of which have an influence on the sustainable refurbishment of buildings.

Keywords: Industrial Heritage Regeneration Education Skills Sustainability

1 Sustainable Regeneration

National Outcome Ten relates to the ‘building of well-designed sustainable places’, and it is in this context that industrial heritage has already played a key part in furthering the success of many regeneration projects. There are several reasons for this.

In many cases, urban areas have been blighted by years and decades of de-industrialisation, and the associated industrial communities have become marginalised. A particularly good example is Glasgow, where Professor John R Hume counted over 1,100 significant industrial buildings when compiling his research in the early 1970s, [2] the number which had fallen to only 200 by 2012. Faced with such steep decline, regeneration has therefore become a major priority, and the surviving historic elements of these areas offer valuable opportunities to enrich rather than detract from even the most ambitious of schemes.

Indeed, experience demonstrates that it is easier to create and maintain a real sense of place if the development does not start from a totally cleared area. More often than not, recognisable historic features are needed to show that transformation has occurred, acting as a reference point from which progress can be calibrated. The inclusion of historic industrial buildings in regeneration projects therefore has the potential to provide a catalyst for change whilst at the same time enabling community engagement and sustainability in place-making. So, while demolition and new-build have their place, if taken to extremes there is a danger of exacerbating discontinuity with the past, and this can work against the re-establishment of a sense of place.
There are a number of encouraging recent examples of urban regeneration schemes in Scotland which have adapted and rehabilitated surviving industrial heritage. These projects have taken advantage of the establishment of City Heritage Trusts (since 2003) and associated grant programmes for historic buildings from Historic Scotland, and the introduction of Conservation Area Regeneration Schemes (CARS), over 20 of which have now been established across Scotland. These in turn have been co-ordinated with the Townscape Heritage Initiatives (THI), which have also received support and funding from the UK Heritage Lottery Fund (HLF) for more than a decade.

A key to the success of these projects has been partnership working, without which taking something from the past and incorporating it meaningfully into the future would be difficult. A particularly good example is in Clydebank where the ‘Titan’ Giant Cantilever crane, built in 1907 by the Forth Bridge engineers, Sir William Arrol, was once the centre-piece within John Brown’s Shipyard. The crane has been retained and refurbished as a landmark, and acts as an iconic focal point of the masterplan for the re-development of the area (see Fig 1). As well as retaining an important link with Clydebank’s extraordinary engineering heritage, the crane has become a significant visitor attraction in its own right.

On the opposite (south side) of the Firth of Clyde, there is another encouraging example of refurbishment and re-use, this time in Greenock (the birthplace of James Watt) where a new €210 million regeneration project by Riverside Inverclyde will save, adapt and re-use the magnificent sugar warehouses at James Watt Dock (Fig 2). Similarly, a kilometre away to the east in Port Glasgow, a former sugar refinery, which spent much of its life being re-used as the Gourock Rope Works, has been converted to apartments (Fig 3). Other examples of urban regeneration projects that have retained industrial buildings at their core include Dundee, where at least 18 former textile mills have been converted to residential use, and in Glasgow where the iconic Templeton’s Carpet Factory (Fig 4) was originally adapted to accommodate business units, but has since been converted into apartments, playing a key role in the regeneration of the Bridgeton area of the city. Further south in the Scottish Borders, textile mills such as Ettrick Mill in Selkirk have also played a central part in urban regeneration after being converted into business centres (Fig 5).
2 Introducing the Issue of Climate Change

The second of the two national outcomes is ‘a commitment to reduce the local and global environmental impact of our consumption and production’, which stems from the passing of the Climate Change (Scotland) Act 2009, and the most ambitious climate-change targets in Europe. [3] For some time now it has become clear that the historic environment has a major part to play in the context of climate change. Put in simple terms, the default position of automatically destroying old buildings is no longer acceptable because of the immense waste of previously-invested embodied energy. This is one of the reasons why Historic Scotland has published its own ‘Climate Change Action Plan’, which covers not only its own activities, but also refers to the historic environment more generally. [4]

In this context, Watson (2012, p.136) notes that those ‘…who try to tackle big issues such as urban renewal or sustainability have found that industrial buildings can and ought to be an opportunity for change’. [5] He goes on to observe that when whole-life costings are taken into account, together with other benefits such as passive aspects of traditional design and the benign nature of many traditional materials, the adaptation and re-use of industrial buildings has major advantages in terms of energy use and climate change.

There is, in fact, no doubt that building preservation can save carbon by using less energy in demolition, sending less waste to landfill and other waste sites, consuming less energy by reducing the quantity of new building materials required, using less energy in manufacturing or processing new building materials (even if they are in themselves more thermally efficient), and expending less energy on new construction processes. However, demonstrating the value of these savings and building an associated evidence base is a major challenge. For this reason, Historic Scotland is supporting research in this area, and is commencing the process of publishing technical papers. [6] So far, some existing industrial buildings seem to perform surprisingly well against modern codes and standards because of the inherent quality of their structure, especially in the case of textile mills.

3 Conclusion

While there is definitely growing enthusiasm for the adaptation and re-use of industrial buildings, there are also growing challenges, not least from the current economic austerity facing most European economies, and the political desire to boost new development and job creation at all costs. This, together with the existing power of the ‘development lobby’
combines to form a destructive mix which can be hard to resist. It has also sometimes been
further intensified by ignorance of the qualities of historic building fabric and technology
amongst property owners and developers, and by taxation regimes that favour new-build
over the refurbishment of existing buildings.

However, it is also becoming clear that by far the most durable and sustainable
regeneration projects retain historic fabric as a core element within their plans, and in the
longer term, prove to be a much a more solid investment. In Scotland, the hope is that the
inclusion of sustainable place making and climate change measures within core
government policies will further add to the momentum, ensuring that more industrial
buildings will become key elements within urban planning and regeneration schemes,
enhancing the lives of urban communities in particular.

Acknowledgement

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References

[1] Scotland’s National Performance Framework, 08.02.2012,


[3] THE SCOTTISH GOVERNMENT, Scotland’s Action Plan to Tackle Climate
Change, 31.1.2012,

plan-2012.pdf.

Heritage Re-tooled: The TICCIH Guide to Industrial Heritage Conservation,

Sustainability Building Management, Historic Scotland, Edinburgh, 2011,